

CLAIMS

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is as follows:

- 1 1. A process for identifying companies likely to outsource their information
2 technology processes, comprising the steps of:
3 identifying positive and negative examples of such companies;
4 extracting features for these companies based on analysis of publicly
5 available information, changes in executive management, and information
6 including mergers and acquisitions; and
7 based on mathematical model, predicting a probability that a company
8 will outsource, using the extracted features as inputs.
- 1 2. The process of claim 1, further comprising the step of identifying
2 companies likely to outsource other business functions such as accounting,
3 human resources, procurement, and customer relationship management.
- 1 3. A process for identifying entities likely to outsource processes, comprising
2 the steps of:
3 identifying positive and negative pre-existing outsourcing instances for
4 such entities;
5 extracting features for these entities based on available information;
6 and
7 providing a score reflecting a likelihood that an entity will outsource,
8 using the extracted features as inputs.

- 1 4. The process of claim 3, wherein an entity is a company.
- 1 5. The process of claim 4, wherein the company is a publicly traded company.
- 1 6. The process of claim 3, wherein outsourcing includes managing or owning
2 some or all of the operations related to the outsourced processes.
- 1 7. The process of claim 6, wherein operations include business functions,
2 information technology (IT) services, computer support, call centers,
3 accounting, human resources, procurement, transaction processing, and
4 customer-relationship management.
- 1 8. The process of claim 6, wherein operations include manufacturing,
2 procurement, marketing, sales, distribution, transportation, and pricing.
- 1 9. The process of claim 3, wherein outsourcing includes managing or owning
2 some or all of the assets related to the outsourced processes.
- 1 10. The process of claim 9, wherein assets include computers, servers,
2 computer storage devices, data centers, network infrastructure, network
3 routers, web servers, and staff.
- 1 11. The process of claim 9, wherein assets include machines, assembly lines,
2 trucks, vehicles, airplanes, and freights.
- 1 12. The process of claim 3, wherein positive pre-existing outsourcing
2 instances include some or all entities that outsourced operations in the past.

1 13. The process of claim 3, wherein negative pre-existing outsourcing
2 instances are based on the pre-existing positive instances.

1 14. The process of claim 3, wherein negative pre-existing outsourcing
2 instances are dictated by business experts.

1 15. The process of claim 3, wherein negative pre-existing outsourcing
2 instances are captured from public information.

1 16. The process of claim 3, wherein the extracted features include financial
2 information.

1 17. The process of claim 16, wherein financial information includes stock
2 price and credit rating.

1 18. The process of claim 3, wherein the extracted features include financial
2 information, stock price, cash flow, gross profit margin, return on assets,
3 expenses, revenue, receivables turnover, credit rating, earning per share, return
4 on equity, inventory turnover, diversification, spending, public and
5 government filings, management, press releases, mergers and acquisitions,
6 accounting discrepancies, layoffs, earning announcements, and labor disputes.

1 19. The process of claim 3, wherein the score is a numerical value.

1 20. The process of claim 19, wherein the score is represented by the likelihood
2 to outsource and the uncertainty of this likelihood.

1 21. The process of claim 19, wherein the score is a discrete value representing
2 the likelihood to outsource and the uncertainty of this likelihood.

1 22. A process for identifying entities likely to outsource their information
2 technology, comprising the steps of:
3 identifying positive and negative pre-existing outsourcing instances of
4 such entities;
5 extracting features for these companies based on publicly available
6 information, including financial information, management structure and
7 changes, and mergers and acquisitions; and
8 predicting a score that a company will outsource, using the extracted
9 features as inputs.

1 23. The process of claim 22, wherein outsourcing includes managing or
2 owning some or all of the operations related to the outsourced processes

1 24. The process of claim 22, wherein operations include business functions,
2 information technology (IT) services, computer support, call centers,
3 accounting, human resources, procurement, transaction processing, and
4 customer-relationship management.

1 25. The process of claim 22, wherein outsourcing includes managing or
2 owning some or all of the assets related to the outsourced processes.

1 26. The process of claim 25, wherein assets include computers, servers,
2 computer storage devices, data centers, network infrastructure, network
3 routers, web servers, and staff.

1 27. The process of claim 22 where the score is the probability of outsourcing
2 and a confidence interval associated with that probability.

1 28. A process for identifying companies likely to outsource services
2 comprising the steps of:

3 constructing a set of historical “positive examples” of companies that
4 have signed outsourcing contracts with any provider for such services;

5 constructing a set of historical “negative examples” of companies that
6 were clearly not interested in outsourcing on a specific date within the recent
7 past;

8 for each positive and negative example, constructing a set of financial
9 and news-based metrics or “features” characterizing each example during a
10 time window created immediately preceding an associated date;

11 building a statistical predictive model designed to predict a probability
12 of any example, characterized by its feature set, belonging to the class of
13 positive examples, this model being optimized to produce a best prediction
14 against the set of positive and negative examples;

15 extracting exactly the same set of features for a “universe” of
16 companies that it is desired to rank as potential outsourcing customers, these
17 features being extracted during a time window preceding a date for which the
18 ranking or score is sought;

19 applying the predictive model to the extracted features for each
20 company in the “universe” of companies;

21 computing a probability that a company belongs to the class of positive
22 examples, the computed probability being used as a score indicating a
23 company’s propensity to outsource; and

24 sorting the scores to yield a desired ordered list of companies to be
targeted.